

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 161573,381
Source: TFW0
Date Processed by STIC: 3/6/07

ENTERED



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/573,381

DATE: 03/06/2007

TIME: 11:17:28

Input Set : N:\efs\03_06_07\10573381_efs\546572Seq.txt
 Output Set: N:\CRF4\03062007\J573381.raw

3 <110> APPLICANT: TAKARA BIO INC.
 5 <120> TITLE OF INVENTION: Polypeptide having RNaseIII activity
 7 <130> FILE REFERENCE: 664746
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/573,381
 C--> 9 <141> CURRENT FILING DATE: 2006-03-24
 9 <150> PRIOR APPLICATION NUMBER: JP 2003-342260
 10 <151> PRIOR FILING DATE: 2003-09-30
 12 <150> PRIOR APPLICATION NUMBER: JP 2003-409638
 13 <151> PRIOR FILING DATE: 2003-12-08
 15 <160> NUMBER OF SEQ ID NOS: 17
 17 <170> SOFTWARE: PatentIn version 3.1
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 678
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Shewanella sp.Ac10
 24 <400> SEQUENCE: 1
 25 atggaaccca taaaaattt gccgcgtttg tgccgtactt taggttatga gttcaataat 60
 27 attgaattac ttattcaggc ctaaacacat cgtagcgcag caaataaaaca taatgagcgt 120
 29 ttagagtttt taggtgattc gattttatcg atagccattt cagatgcctt atatcatcag 180
 31 tttccaaagg cgactgaagg tgatttaagc cgaatgcgcg ccacttttagt caaaggtgac 240
 33 acgctgacaa tcatactaa agagttcaag ctaggtgatt atttgttattt aggtcctgg 300
 35 gaactcaaaa gtggtggtt tagacgcgaa tctattttag ctgatgctgt agaggctatt 360
 37 attggtgctg tctatcttga tgctgatattt gaagtgtgcc gcaagctattt attatcatgg 420
 39 tatcaagagc gtttagctga gattaaaccg ggtattaatc aaaaagatcc gaagacaata 480
 41 ttgcaagaat acctgcaagg tttaaaaag ccattgcctg attaccaagt tgttgcagta 540
 43 gaagggtgaag cccatgatca aaccttcacc gttagaatgta aaatttagtga attagataaa 600
 45 gttgtcaccg gtgtggcaag ttcaagaaga aaagctgaac agcttgcgcg tgctcaggta 660
 47 ttggagctac tgaataaa 678
 50 <210> SEQ ID NO: 2
 51 <211> LENGTH: 39
 52 <212> TYPE: DNA
 53 <213> ORGANISM: Artificial
 55 <220> FEATURE:
 56 <223> OTHER INFORMATION: Synthetic primer 1 to amplify a gene encoding Shewanella
 sp.AC10 RNaseIII
 58 <400> SEQUENCE: 2
 59 cagattccac gaattcgatg gaacccattt aaaaatttgc 39
 62 <210> SEQ ID NO: 3
 63 <211> LENGTH: 37
 64 <212> TYPE: DNA
 65 <213> ORGANISM: Artificial
 67 <220> FEATURE:
 68 <223> OTHER INFORMATION: Synthetic primer 2 to amplify a gene encoding Shewanella
 sp.AC10 RNaseIII

70 <400> SEQUENCE: 3

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71 ggagaggctt ggatcccttat ttattcagta gtcctt 37
 74 <210> SEQ ID NO: 4
 75 <211> LENGTH: 226
 76 <212> TYPE: PRT
 77 <213> ORGANISM: Shewanella sp.AC10
 79 <400> SEQUENCE: 4
 81 Met Glu Pro Ile Lys Asn Leu Pro Arg Leu Cys Arg Thr Leu Gly Tyr
 82 1 5 10 15
 85 Glu Phe Asn Asn Ile Glu Leu Leu Ile Gln Ala Leu Thr His Arg Ser
 86 20 25 30
 89 Ala Ala Asn Lys His Asn Glu Arg Leu Glu Phe Leu Gly Asp Ser Ile
 90 35 40 45
 93 Leu Ser Ile Ala Ile Ser Asp Ala Leu Tyr His Gln Phe Pro Lys Ala
 94 50 55 60
 97 Thr Glu Gly Asp Leu Ser Arg Met Arg Ala Thr Leu Val Lys Gly Asp
 98 65 70 75 80
 101 Thr Leu Thr Ile Ile Ala Lys Glu Phe Lys Leu Gly Asp Tyr Leu Tyr
 102 85 90 95
 105 Leu Gly Pro Gly Glu Leu Lys Ser Gly Gly Phe Arg Arg Glu Ser Ile
 106 100 105 110
 109 Leu Ala Asp Ala Val Glu Ala Ile Ile Gly Ala Val Tyr Leu Asp Ala
 110 115 120 125
 113 Asp Ile Glu Val Cys Arg Lys Leu Leu Leu Ser Trp Tyr Gln Glu Arg
 114 130 135 140
 117 Leu Ala Glu Ile Lys Pro Gly Ile Asn Gln Lys Asp Pro Lys Thr Ile
 118 145 150 155 160
 121 Leu Gln Glu Tyr Leu Gln Gly Phe Lys Lys Pro Leu Pro Asp Tyr Gln
 122 165 170 175
 125 Val Val Ala Val Glu Gly Glu Ala His Asp Gln Thr Phe Thr Val Glu
 126 180 185 190
 129 Cys Lys Ile Ser Glu Leu Asp Lys Val Val Thr Gly Val Ala Ser Ser
 130 195 200 205
 133 Arg Arg Lys Ala Glu Gln Leu Ala Ala Ala Gln Val Leu Glu Leu Leu
 134 210 215 220
 137 Asn Lys
 138 225
 141 <210> SEQ ID NO: 5
 142 <211> LENGTH: 243
 143 <212> TYPE: PRT
 144 <213> ORGANISM: Artificial
 146 <220> FEATURE:
 147 <223> OTHER INFORMATION: An expression peptide sequence of Shewanella sp.AC10
 RNaseIII
 149 <400> SEQUENCE: 5
 151 Met Asn His Lys Val His His His His His Ile Glu Gly Arg Asn
 152 1 5 10 15
 155 Ser Met Glu Pro Ile Lys Asn Leu Pro Arg Leu Cys Arg Thr Leu Gly
 156 20 25 30
 159 Tyr Glu Phe Asn Asn Ile Glu Leu Leu Ile Gln Ala Leu Thr His Arg
 160 35 40 45

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163 Ser Ala Ala Asn Lys His Asn Glu Arg Leu Glu Phe Leu Gly Asp Ser
 164 50 55 60
 167 Ile Leu Ser Ile Ala Ile Ser Asp Ala Leu Tyr His Gln Phe Pro Lys
 168 65 70 75 80
 171 Ala Thr Glu Gly Asp Leu Ser Arg Met Arg Ala Thr Leu Val Lys Gly
 172 85 90 95
 175 Asp Thr Leu Thr Ile Ile Ala Lys Glu Phe Lys Leu Gly Asp Tyr Leu
 176 100 105 110
 179 Tyr Leu Gly Pro Gly Glu Leu Lys Ser Gly Gly Phe Arg Arg Glu Ser
 180 115 120 125
 183 Ile Leu Ala Asp Ala Val Glu Ala Ile Ile Gly Ala Val Tyr Leu Asp
 184 130 135 140
 187 Ala Asp Ile Glu Val Cys Arg Lys Leu Leu Ser Trp Tyr Gln Glu
 188 145 150 155 160
 191 Arg Leu Ala Glu Ile Lys Pro Gly Ile Asn Gln Lys Asp Pro Lys Thr
 192 165 170 175
 195 Ile Leu Gln Glu Tyr Leu Gln Gly Phe Lys Lys Pro Leu Pro Asp Tyr
 196 180 185 190
 199 Gln Val Val Ala Val Glu Gly Glu Ala His Asp Gln Thr Phe Thr Val
 200 195 200 205
 203 Glu Cys Lys Ile Ser Glu Leu Asp Lys Val Val Thr Gly Val Ala Ser
 204 210 215 220
 207 Ser Arg Arg Lys Ala Glu Gln Leu Ala Ala Ala Gln Val Leu Glu Leu
 208 225 230 235 240
 211 Leu Asn Lys
 215 <210> SEQ ID NO: 6
 216 <211> LENGTH: 720
 217 <212> TYPE: DNA
 218 <213> ORGANISM: Artificial
 220 <220> FEATURE:
 221 <223> OTHER INFORMATION: red-shifted green fluorescence protein
 223 <400> SEQUENCE: 6
 224 atggcttagca aaggagaaga actcttcact ggagttgtcc caattcttgt tgaatttagat 60
 226 ggtgatgtta acggccacaa gttctctgtc agtggagagg gtgaagggtga tgcaacatac 120
 228 gaaaaactta ccctgaagtt catctgcact actggcaaac tgcctgttcc atggccaaca 180
 230 ctagtcacta ctctgtgcta tggtgttcaa tgctttcaa gatacccgga tcataatgaaa 240
 232 cggcatgact tttcaagag tgccatgccc gaaggttatg tacagggaaag gaccatcttc 300
 234 ttcaaagatg acggcaacta caagacacgt gctgaagtca agtttgaagg tgatacccctt 360
 236 gtaatagaa tcgagttaaa aggtattgac ttcaaggaag atggaaacat tctggacac 420
 238 aaatttggaat acaactataa ctcacacaaat gtatacatca tggcagacaa acaaaagaat 480
 240 ggaatcaaag tgaacctcaa gacccgcccc aacattgaag atggaagcgt tcaactagca 540
 242 gaccattatc aacaaaatac tccaattggc gatggccctg tccttttacc agacaaccat 600
 244 tacctgtcca cacaatctgc ctttcgaaa gatcccaacg aaaagagaga ccacatggtc 660
 246 cttcttgagt ttgttaacagc tgctgggatt acacatggca tggatgaact gtacaactga 720
 249 <210> SEQ ID NO: 7
 250 <211> LENGTH: 42
 251 <212> TYPE: DNA
 252 <213> ORGANISM: Artificial
 254 <220> FEATURE:

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255 <223> OTHER INFORMATION: Synthetic primer dsr-1 to amplify a gene encoding red-shifted green fluorescence protein

257 <400> SEQUENCE: 7

258 gggtaatacg actcaactata gggagaatgg ctagcaaagg ag 42

261 <210> SEQ ID NO: 8

262 <211> LENGTH: 42

263 <212> TYPE: DNA

264 <213> ORGANISM: Artificial

266 <220> FEATURE:

267 <223> OTHER INFORMATION: Synthetic primer dsr-2 to amplify a gene encoding red-shifted green fluorescence protein

269 <400> SEQUENCE: 8

270 gggtaatacg actcaactata gggagatcg ttgtacagtt ca 42

273 <210> SEQ ID NO: 9

274 <211> LENGTH: 42

275 <212> TYPE: DNA

276 <213> ORGANISM: Artificial

278 <220> FEATURE:

279 <223> OTHER INFORMATION: Synthetic primer dsl-1 to amplify a gene encoding luciferase

281 <400> SEQUENCE: 9

282 gggtaatacg actcaactata gggagaatgg aagacgccaa aa 42

285 <210> SEQ ID NO: 10

286 <211> LENGTH: 42

287 <212> TYPE: DNA

288 <213> ORGANISM: Artificial

290 <220> FEATURE:

291 <223> OTHER INFORMATION: Synthetic primer dsl-2 to amplify a gene encoding luciferase

293 <400> SEQUENCE: 10

294 gggtaatacg actcaactata gggagagaac gtgtacatcg ac 42

297 <210> SEQ ID NO: 11

298 <211> LENGTH: 42

299 <212> TYPE: DNA

300 <213> ORGANISM: Artificial

302 <220> FEATURE:

303 <223> OTHER INFORMATION: Synthetic primer dsl-3 to amplify a gene encoding luciferase

305 <400> SEQUENCE: 11

306 gggtaatacg actcaactata gggagaggca gatggaacct ct 42

309 <210> SEQ ID NO: 12

310 <211> LENGTH: 66

311 <212> TYPE: PRT

312 <213> ORGANISM: Thermotoga maritima

314 <400> SEQUENCE: 12

316 Met Arg Gly Lys Val Lys Trp Phe Asp Ser Lys Lys Gly Tyr Gly Phe
 317 1 5 10 15

320 Ile Thr Lys Asp Glu Gly Gly Asp Val Phe Val His Trp Ser Ala Ile
 321 20 25 30

324 Glu Met Glu Gly Phe Lys Thr Leu Lys Glu Gly Gln Val Val Glu Phe
 325 35 40 45

328 Glu Ile Gln Glu Gly Lys Lys Gly Pro Gln Ala Ala His Val Lys Val
 329 50 55 60

332 Val Glu

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333 65
336 <210> SEQ ID NO: 13
337 <211> LENGTH: 198
338 <212> TYPE: DNA
339 <213> ORGANISM: Thermotoga maritima
341 <400> SEQUENCE: 13
342 atgagaggaa aggttaagtg gttcgattcc aagaaggct acggattcat cacaaggac      60
344 gaaggaggag acgtgttcgt acactggtca gccatcgaaa tggaaagggtt caaaactctg    120
346 aaggaaggcc aggtcgctcgat ttcgagatt caggaaggca agaaaggctt acaggcagcg    180
348 cacgtgaaag tagtttagg                                         198
350 <210> SEQ ID NO: 14
351 <211> LENGTH: 20
352 <212> TYPE: DNA
353 <213> ORGANISM: Artificial
355 <220> FEATURE:
356 <223> OTHER INFORMATION: Synthetic primer rsGFP-F to amplify a gene encoding rsGFP
358 <400> SEQUENCE: 14
359 gcccacaacat tgaagatgg                                         20
362 <210> SEQ ID NO: 15
363 <211> LENGTH: 20
364 <212> TYPE: DNA
365 <213> ORGANISM: Artificial
367 <220> FEATURE:
368 <223> OTHER INFORMATION: Synthetic primer rsGFP-R to amplify a gene encoding rsGFP
370 <400> SEQUENCE: 15
371 gaaaggcgag attgtgttgg                                         20
373 <210> SEQ ID NO: 16
374 <211> LENGTH: 20
375 <212> TYPE: DNA
376 <213> ORGANISM: Artificial
378 <220> FEATURE:
379 <223> OTHER INFORMATION: Synthetic primer Neo-F to amplify a gene encoding Neo
381 <400> SEQUENCE: 16
382 atagcggttgg ctaccgcgtga                                         20
385 <210> SEQ ID NO: 17
386 <211> LENGTH: 20
387 <212> TYPE: DNA
388 <213> ORGANISM: Artificial
390 <220> FEATURE:
391 <223> OTHER INFORMATION: Synthetic primer Neo-R to amplify a gene encoding Neo
393 <400> SEQUENCE: 17
394 gaaggcgata gaaggcgatg                                         20

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 03/06/2007
PATENT APPLICATION: US/10/573,381 TIME: 11:17:29

Input Set : N:\efs\03_06_07\10573381_efs\546572Seq.txt
Output Set: N:\CRF4\03062007\J573381.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:2; Line(s) 56
Seq#:3; Line(s) 68
Seq#:7; Line(s) 255
Seq#:8; Line(s) 267

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:2,3,5,6,7,8,9,10,11,14,15,16,17

VERIFICATION SUMMARY

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Input Set : N:\efs\03_06_07\10573381_efs\546572Seq.txt
Output Set: N:\CRF4\03062007\J573381.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date